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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,250	08/23/2005	Per Herbert Kristensen	P17993USPC	1874
29078	7590	09/26/2008		
CHRISTIAN D. ABEL ONSAGERS AS POSTBOKS 6963 ST. OLAVS PLASS NORWAY, N-0130 NORWAY			EXAMINER PRICE, CRAIG JAMES	
			ART UNIT 3753	PAPER NUMBER
			MAIL DATE 09/26/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/538,250

Applicant(s)

KRISTENSEN ET AL.

Examiner

Craig Price

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 5-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 September 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/23/2008 has been entered.

Drawings

Applicant's amendment overcomes the drawing objections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5- 9, 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Eagles (4,315,533).

Eagles discloses a system to transfer fluid via at least one pipeline from one structure to another structure, comprising a first structure having an offloading arm (Q) which is movable in two planes perpendicular to each other and in which a part of the offloading arm remote from the first structure is engagable with a second structure, so to

allow linear and rotational movements between the structures, and wherein at least a part of the pipeline along the offloading arm, remote from the first structure is attached to the offloading arm by means of at least one support (AH) moveable lengthwise relative to the offloading arm, and this part of the pipeline includes at least a first pipeline section (AC) configured to compensate for movements between the two structures in the longitudinal direction of the offloading arm, and that the first pipeline section (AC) is configured as a spiral with the axis of the spiral extending generally parallel with the longitudinal direction of the offloading arm, and where the spiral pipeline is capable of sustaining a spiral shape under the combined weight of the pipeline and fluid within the pipeline as shown in Figure 1.

Regarding claim 5, Eagles discloses that the part of the pipeline also includes at least a second rigid pipeline section (the sections exist on both sides of Q) connected to supports moveable lengthwise relative to the offloading arm as shown in Figure 1.

Regarding claim 6, Eagles discloses that at least one of the supports is a wheel mounted trolley (AM) arranged for movement lengthwise relative to the offloading arm as shown in Figures 1 and 2.

Regarding claim 7, Eagles discloses that the part of the pipeline remote from the one structure and engagable with the other structure is itself connected to or part of another support (AH) moveable lengthwise relative to the offloading arm as shown in Figures 1 and 2.

Regarding claim 8, Eagles discloses that the pipeline is connected to the respective structures by joints (AD) capable of accommodating angular and rotational

movement between the pipeline and the respective structure as shown in Figure 1.

Regarding claim 9, Eagles discloses that the pipeline is connected to one of the respective structures by a hinge joint (L) and to the other of the respective structures by a universal joint (AV).

Regarding claim 11, Eagles discloses that there are a plurality of pipelines extending between the structures as shown in Figures 1 and 2.

Regarding claim 12, Eagles discloses that a joint between the offloading arm and the other of the structures is formed as a pin (BT) downwardly dependant from the offloading arm, and rotatable about a vertical axis in a receptacle (BU, figure 2 shows the rotation potential for BT about the vertical axis in the receptacle) on the other of the structures.

Regarding claim 13, Eagles discloses that tension (through cable BX) is applied between the other structure and the part of the offloading arm engagable with that other structure, so to resist separation of the loading arm and the other structure as shown in Figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

On the basis that the recitation "spiral" in claim 1 must be read as having a uniform diameter along the length of the pipeline, then the following applies,

Claims 1, 5 - 9, 11-13 are rejected under 35 U.S.C. 103(a), in an alternative reading of the claims, as being unpatentable over Eagles (4,315,533) in view of Fye et al. (3,381,711).

Eagles has disclosed all of the features of the claimed invention although is silent to having a spiral shaped pipeline.

Fye et al. disclose a fluid conveying system which teaches the use of a spiral shaped conduit (12) being used on a boom.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the conduit of Eagles with a spiral hose as taught by Fye et al. in order to eliminate the swivel connection joints, thereby increasing the useful life of the conduit.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eagles '533 in view of Gill (4,393,906).

Eagles is silent to the pipeline having at least one joint arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent lengths of pipeline (it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish).

Gill discloses the pipeline having at least one joint (27) arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent lengths of pipeline.

It would have been obvious to one of ordinary skill in the art at the time of invention to employ the joint of Gill into the device of Eagles to have the pipeline having at least one joint arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent lengths of pipeline in order to accommodate axial movement of the inboard end of the boom (Col. 3, Lns. 9-12).

Claim 10 is rejected under 35 U.S.C. 103(a), in an alternative reading of the claims, as being unpatentable over Eagles '533 and Fye et al. (3,381,711) as applied to claim 9 above and further in view of Gill (4,393,906).

Eagles and Fye et al. are silent to the pipeline having at least one joint arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent

lengths of pipeline (it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish).

Gill discloses the pipeline having at least one joint (27) arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent lengths of pipeline.

It would have been obvious to one of ordinary skill in the art at the time of invention to employ the joint of Gill into the device of Eagles to have the pipeline having at least one joint arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent lengths of pipeline in order to accommodate axial movement of the inboard end of the boom (Col. 3, Lns. 9-12).

Response to Arguments

Applicant's arguments filed 9/23/2008 have been fully considered but they are not persuasive. The argument concerning that the Eagles reference does not disclose a spiral is non-persuasive because, the pipeline AD of Eagles is connected by swivel joints, and at each of those swivel joints the flow path traverses an angle of approximately 180 degrees when passing from one pipe, through the swivel, to the other pipe. Regardless of the fact that the Eagles reference states that the pipeline is shaped in the form of a "zig-zag", the combination of the elbows and joints and the manner in which they are connected configures the pipeline in such a manner that this pipeline is configured as a spiral in the broadest interpretation of the meaning spiral. The pipeline is not in a common plane, since the swivel joints are connected by elbows

to the main pipe segment which offsets the next pipeline from the previous pipeline, from any common plane. The pipeline of Eagles is a continuous three dimensional shape having an oblong spiral pattern. If the possibility exists that the applicant does not agree with the Examiner's interpretation of the spiral shaped conduit in the Eagles reference, then a secondary teaching is provided by the Fye et al. reference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP

24 September 2008

/John Rivell/

Primary Examiner, Art Unit 3753

/C. P./

Examiner, Art Unit 3753